

The Wobbly Oscillator



Hams Who Serve

Cuyahoga Amateur Radio Society

August 2023

Volume 53

Number 8



Summer Picnic Aug 18

From The Prez
Toby, WT8D

CARS Summer Picnic

Come one-come all, to the 16th annual CARS summer picnic Friday, August 18th at the Kiwanis pavilion near the Independence Civic Center. The picnic will begin at 5:00 PM. The picnic is **FREE**, I say again **FREE** to all CARS members, their families, and their friends. The details are on the CARS website and in the attached flyer. Please contact me at 440-525-6109 or wt8o@att.net to make reservations.

After a two year interruption due to the pandemic the annual summer picnic is back, and we plan to enhance this year's event in an attempt to make it the best CARS picnic ever. The club will provide the usual picnic cuisine. Expert grillers will prepare burgers, brats, and dogs to the guests' desires. We will also supply potato salad and coleslaw. We ask members to bring side dishes and desserts. Besides the buffet, we will expand our array of games, both outdoor and indoor. At the July meeting corn hole, Jarts, bocce, horseshoes, Jenga, and board games were suggested. Besides the 50/50 drawing, each attendee will be given a complimentary ticket for a separate drawing. There will be a radio call-in on the 146.82 CARS repeater. All stations checking in will be eligible for yet another prize.

Please mark your calendars for Friday, August 18th, and plan to attend the **FREE** CARS summer picnic.

More Radio Activities

At the Field Day wrap-up meeting it was proposed we ought to have more in-field radio activities to prepare members by giving them practice and experience for the big June contest. Examples of some of these events are Parks on the Air, Lighthouse Weekends, and Winter Field Day, just to name a few. This will be another item for discussion at monthly meetings.

HF Net

One of our fellow members suggested at a recent monthly meeting we conduct a local HF net, possibly on 10 meters. It is interesting that members who are also in two other clubs reported on the success of their respective club's 10 meter nets; one said theirs was a flop, the other said theirs was a huge success. Of note, the participant in the successful net mentioned their Net Control Station was located out in Mentor, while the less successful one had all participants, including the NCS, in a much smaller area.

We are forming a committee to determine the feasibility of a HF net. We will discuss the proposed HF net at future meetings. Anyone interested in joining the committee please volunteer at the August meeting or contact me.

Next CARS Meeting

Tuesday, August 8 - 7:30 PM

Dan Valaski

**Manager for Outreach,
Engagement And Inclusion**

Cleveland Metroparks

Harriet Keeler Picnic Area

Brecksville Reservation

Cleveland Metroparks

See Website for Details - www.2cars.org

**WELCOME NEW
MEMBER
NATHAN VAPENIK
KE8YWD**



Nathan, KE8YWD

July 2023 Meeting Minutes

LOCATION — The meeting was held on July 11th, at the Harriett Keeler Picnic Pavilion in the Brecksville Reservation of the Cleveland Metroparks.

CALLED TO ORDER — The meeting was called to order by President Toby Kolman, WT8O, at 7:37 PM

PLEDGE OF ALLEGIANCE — Those present pledged allegiance to the flag of the United States of America.

INTRODUCTIONS — Those present introduced themselves. 24 individuals attended the meeting, including three non-members.

JUNE MINUTES — The June minutes were approved as published in the *WO*, with the correction that the post meeting program was Bob, K8RGI; Toby, WT8O, and Arp, K8ARP, presenting on Field Day 2023.

TREASURER'S REPORT — Bob Robbins, K8RGI, reported on the Club's current financial situation. No issues or concerns were identified. Recent Club income includes receipt of Hamvention Bus money.

PRESIDENT'S REPORT — Toby Kolman, WT8O, reported the following:

- The summer picnic will be held August 18th 5:30 PM at the Kiwanis Pavilion in Independence, Ohio. Please let Toby know if you plan to attend. Additional details can be found on the Club website (<https://2cars.org/PDF/2023-picnic-flyer.pdf>).
- Several Club positions need to be filled. The open positions include holiday party committee chair, secretary, and photographer. Toby is chairing the summer picnic committee. Matt Neely, NU8H, plans to run for Secretary in November.
- Thanks to everyone for their *WO* contributions. Articles can be about anything of interest to members, including vacations and new equipment. Photos are especially welcome. Toby is looking for suggestions to improve the newsletter.
- Please sign in on the sign in sheet.



The group had a perfect summer evening to get together for the July meeting.

Robert, K8RGI, gathered his nerves before delivering the treasury report.



VICE PRESIDENT'S REPORT — Ron Hollas, K8RJH, reported the following:

- Please pay your ARRL dues through the Club so we receive a commission.
- The ARRL member survey is complete (<http://arrl.org/dues-survey>). The Board of Directors is reviewing the results. Some likely changes will be an increase in dues and more kits for new hams.
- Check out the latest ARRL podcast.
- ARRL audio news is posted every Friday.



Bob, KC8MRC, won a pedometer as runner-up in the 50/50.



Tom Wertman, co-director of the Ohio MUFON gave an excellent, well balanced talk on Ufology.

SECRETARY'S REPORT — Matt Perlman, KE8OZU, thanked Matt Neely, NU8H, for covering Secretary duties at the May and June meetings.

NEW MEMBERS — Two new members, Joel Hurlbert, KE8YKO, and Nathan Vapenik, who has not received his callsign yet, were voted into the Club. *[Nathan later received his call of KE8YWD. Ed.]*

PUBLIC SERVICE — Arp, K8ARP, reported the following:

- N8ESG, <https://n8esg.org/>, has a full list of events.
- The Pan Ohio Hope Ride starts July 20 and goes from Berea to Dayton over four days. The event pays for hotel and gas. A safety training course may be required for volunteers. Please let Eddie, KD8FTS, know if you are interested.

Chuck, K8CVM, reported the following:

- The MS 150 and the Cleveland Triathlon are on the same day. Volunteers are needed for both.
- There is an ARES meeting on July 18th at the Helwig Whistle Stop in Berea, OH.
- The August ARES meeting will be held at the Cuyahoga EOC.
- 2024 will be a busy year for Cleveland event support, including the Women's Final Four, the Eclipse and the Pan America Games. Bob, KC8MRC, is interested in helping with the Eclipse event.

VE UPDATE — Metro, W8MET, reported that the VE session July 9th resulted in two new Technicians and one Technician to General upgrade. The next VE session will be at 9:15 AM on September 10th at the Old Rec Center in Independence.

PROGRAM COMMITTEE — Joe, KD8BAL, reported that upcoming presentations for CARS meetings include:

- Today's program is Thomas Wertman presenting on Ufology.
- August's and September's programs are TBA.
- Please contact Joe with ideas for future programs.

TECH COMMITTEE — Scott, AC8NW, had nothing to report.

FIELD DAY — Toby, WT8O thanks Bob, K8RGI, for another successful Field Day. Toby also presented certificates to Club members who participated in the event this year.

REFRESHMENTS — Toby, WT8O, thanked Ron, K8RJH, for providing soft drinks, Matt, NU8H, for providing doughnuts and John, NU8Y, for providing coffee.

OLD BUSINESS — Toby, WT8O, led a discussion on the following:

- The Club will be forming a committee to determine if a 10 meter net will be established. Mark, KC8ESG, and Chuck, K8CVM, will be part of the committee.

NEW BUSINESS — Toby, WT8O, led a discussion on the following:

- There will be a 2 meter call in station at the picnic using the 146.82 repeater. Mark, KC8ESG, will handle the net.
- Multiple activities may be available at the picnic, including corn hole, Jarts, bocce, horseshoes and outdoor Jenga.
- George, K8KR, noted that there are more sunspots now than any time in the past 50 years. This means that 10m and 6m communication will be great, especially as we head into winter.
- David, AC8TN, announced that there will be another CW class this fall. Joel, K8SHB, will be teaching along with David. Ron, K8RJH, will act as an advisor. There's a brainstorming session on August 8th at 6:30 PM at the Harriett Keeler pavilion, immediately before the next monthly CARS meeting, for anyone interested.

NEXT MEETING — The next meeting of The Cuyahoga Amateur Radio Society will be August 8th, 2023, at the Harriett Keeler Picnic Pavilion in the Brecksville Reservation of the Cleveland Metroparks.

50/50 Drawing — Matt, KE8OZU, won the 50/50 drawing and donated the winnings to the Club. Bob, KC8MRC, won the door prize of a pedometer.

ADJOURNMENT — Ron, K8RJH, adjourned the meeting at 8:22 PM.

After the meeting, Thomas Wertman, the Ohio director of MUFON, presented on Ufology.

Submitted by Matt Perlman, KE8OZU, CARS Secretary



Matt, KE8OZU, wins the 50/50.

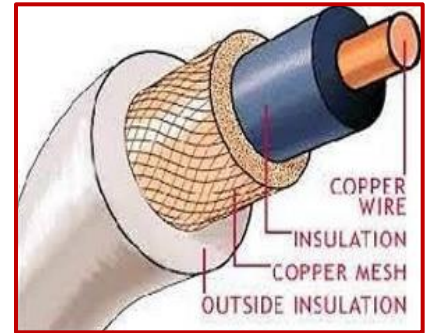


George, K8KR; Robert, K8RGI, and Bill, KD8QBB, enjoy the picnic

A Primer on Coax

Ron, K8RQH

During this year's Field Day, several new members were interested in the use of the different types of coax that connected the stations to the various site antennas. One could find RG-8X, RG-8, LMR-400 just to name a few types that were being used. Even though they pretty much look the same except for the thickness, these coax types are different and are designed to fulfill a specific need and range performance for RF (radio frequency) applications. So, here is a short primer about "coax types" to help understand this subject.



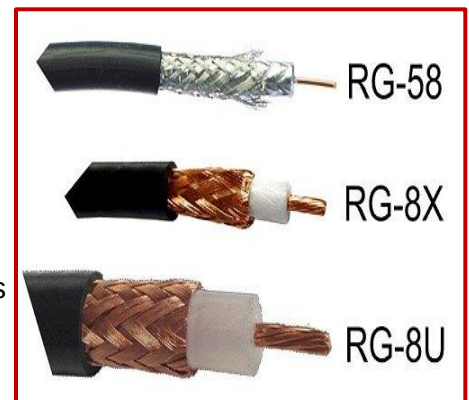
Elements of a coax cable

What is RG?

RG, or Radio Guide, is the original military specification "type" for coaxial cables. This specification dates back to World War II which has been periodically updated and published today as the "Mil-C-17 Standard". The numbers following RG in a part number are often an indicator of size, referring to the diameter of the cable. Higher RG numbers have a thinner central conductor and vice versa. Common cable numbers used in the Amateur service would be RG-8/U, RG-58, RG-8X (Thicker) and RG-174 (Thinner).

Most RG numbers also refer to shielding type, jacket type, and dielectric type (which gives its impedance property). Different types of RG ratings for each type of coax cable help to distinguish the distinct characteristics and specifications of the cable. For example, in the designation RG-#/U, the U indicates general utility use and the RG-#/X can mean special performance.

Be aware that different RG cable types may be arbitrary and are not always indicative of the specific form and function of the cable itself. Therefore, when looking for a coax cable, the most important factor to know is the frequency range you will be using, power levels and acceptable loss with using the cable type.



Popular Amateur Coax Types

After you have narrowed down your options with a basic requirement, look closely at the cable specifications to find a useable match. This is especially true when comparing different manufacturer specifications. Many of the standards have become vague, so an RG-58B/U could have different characteristics from one manufacturer when compared to another.

The two main types of coax cables readily available are ones with an impedance of 50 Ohm and ones with an impedance of 75 Ohm. Ohm refers to the impedance, which is the measure of resistance in the cable to the flow of electrical energy. Cables with 50 Ohm ratings are used for data and wireless (such as Amateur) communications while 75 Ohm cables are used for CATV systems.

What is LMR?

Although “Mil-C-17” cables cover an enormously wide range of applications, they may not always be the best choice for every application. A specialty coax type may be selected to meet a high-performance specification. Some of these types may include LMR (LAND Mobile Radio) low-loss cable and Low PIM (passive intermodulation distortion) coaxial cables which may be found at some Amateur stations.

An LMR 50 Ohm low-loss flexible coax cable is usually manufactured with multiple shield count (usually two shields) that offer a high RF shielding of up to 90 dB! (Standard RG-() cables are much lower at 40 dB, making LMR a good choice for high density RF use such as in Cell Phone towers which may have dozens of high power radios systems in a very small, confined space.) Their polyethylene (PE) jackets provide better UV (ultraviolet) and weather protection than other coax cables and usually guaranteed for up to 20 years of use in harsh weather conditions. As most coax cables use bare copper or tin or aluminum for their shield wire, LMR cables use tinned, oxygen-free copper for a better conductor and extended life. LMR cables also are constructed with a single oxygen-free copper-plated aluminum alloy conductor offering flexibility and high conductivity.



LMR-400 Coax. Note the additional shielding (foil tape) layer under the wire mesh shield.

A Final Note

Just as there are many different types of cables available in the new and after-market (resale, hamfests, or even estate sales), be aware that the costs for each type can vary from affordable to “out-of-my-budget”. It’s always a good idea to ask around for the market price per foot to make sure you are getting a good value for the purchase. Also, for trouble free installation, obtain the proper connector and adapters specifically designed for the cable type.

Typically for Amateur radio use, a SO-239 (UHF Female/UHF Jack or “SOcket”) is installed ON THE RADIO, and the PL-259 (UHF Male/UHF “PLug”) is installed ON THE CABLE. The two “mate” and are collectively known as a UHF Connection.

The term “UHF” for connector types was established in the 1930’s when coax cables were first introduced, and 100 MHz was considered UHF. The “UHF” term was initially applied to any connection that could be used at 30 MHz. The connector name was assigned from the Joint Electronics Type Designation System used by the US Military and is still in use today. The first application of the PL-259 and SO-239 connectors were used to connect coax signal cables to operator consoles with the early RADAR sets.



(Left) UHF Female SO-239 vs. (Right) UHF Male PL-259

Coax For Sale

Bob Check, W8GC, has about 2,000 feet of coax for sale in lengths of 8 ft to 134 ft at \$0.50 a foot with connectors on both ends of most pieces.

Contact Bob at 216-524-1750 or bob@2cls.com

August Birthdays

Brent Grover, KS000	S-7
Eddie Stevens, KDSFTS	S-14
Ron Hollas, KSRJH	S-16
Tom Wayne, WBSN	S-17
Mark Rosewicz, KCSESG	S-19
Erin Austin, KDSSLV	S-22
Gene Stepanik, KESGUZ	S-22
Gerald Purcell, KCSLAU	S-24
Sharon Nicastro, KDSHWQ	S-28
Fred Freer, KSIG	S-30

CARS REPEATERS

146.820 (-) PL Tone 110.9

Analog Repeater

Main Site – Brecksville

Receive Only Site – Brunswick

Receive Only Site – Shaker Hts.

Allstar Node 47067

EchoLink Node 343470 (K8ZFR-R)

WIRES X Node 91242 Room 01242

443.825 (+) PL Tone 131.8

Digital Yaesu Fusion

Linked to 146.820 Repeater

Brecksville

444.75 (+) PL Tone 131.8

Analog Repeater

Not Linked to Other Repeaters

Shaker Hts.



A group of riders in a residential neighborhood with the support vehicle following closely.



Eddie, KD8FTS, and Robert, K8RGI, pose along side of one of the trusty support vehicles.



There was quite an impressive group of participants.

CARS Members at the Pan Ohio Hope Ride

Cyclists pedaled four grueling days from Cleveland to Cincinnati raising funds for the American Cancer Society. The riders began Thursday, July 20th and finished Sunday July 23, overnighting in Wooster, Columbus, and Dayton.

We are proud to say that several CARS members supported the event this year. Eddie, KD8FTS; Bill, N8BBB; Robert, K8RGI, and his and XYL Karen. Hats off to those folks for putting another feather in the CARS cap and demonstrating what the Amateur Radio Service is all about.

Check out the accompanying photos to get a better idea of what the event was all about.

Many thanks to Robert, K8RGI, and Eddie, KD8FTS, for the first class lens work.



The scene was superb on many sections of the course.



Robert, K8RGI, donning his infamous trademark hat and his charming XYL Karen, keep the riders on course.



The riders bunched up handlebar to handlebar pedaling their hearts out in support of a great cause.

Promoting Ham Radio

John, NU8Y

A few years ago, while driving down Broadview Road on a Saturday morning in June, I saw the CARS Field Day sign and noticed the words "Ham Radio." I have always been curious about radio transmission, so later that day I went back to see what was going on there. At Calvin Park I was greeted by a ham who took me all around and gave me an overview of ham radio. He was extremely accommodating and also told me about the classes that CARS offered. The following spring, I attended the Technician class and got my first license. In the next two years I obtained the General and then the Extra licenses. The kindness shown to me at the Field Day event and also at the classes encouraged me to follow through with this new hobby.

This year while working at our Field Day event, I too made it a point to greet visitors and make them feel as welcome as possible. I stopped transmitting a few times to show people around. I answered many questions the best I could and asked more knowledgeable hams to chime in on topics beyond my experience.

Seeing all of our expensive high-tech equipment was a bit overwhelming for some of our visitors. I explained to people that I currently operate a \$200 dual-band radio from my basement with a \$75 antenna and a \$20 garden tractor battery, and that I initially started out with only a \$75 handheld radio.

Low-tech or very high-tech, this is a hobby where you can progress as slowly or as fast as you want and spend a little or a lot.

Amateur radio is an exciting hobby, and we all need to make sure we do whatever we can to help promote it. Try to make everyone who attends our meetings or nets feel as welcome as possible, and we will all enjoy amateur radio even more.



NU8Y represents a basic ham station.

August Net Shed

Aug	2	WT8O
Aug	9	K8RJH
Aug	16	KD8ACO
Aug	23	AC8NW
Aug	30	AC8TN

**Nets are run every Wednesday at
9:00 PM on:**

146.820 (PL 110.9)

**443.825(+) PL Tone 131.8
Digital Yaesu Fusion / C4FM
Linked to the 146.82 Repeater**

EchoLink Node 343470 (K8ZFR-R)

Allstar Node 47067

WIRES X Node 91242 Room 01242

July VE Session

Once again, Metro, W8MET, competently led his outstanding VE team consisting of Gary, NI8Z; George, K8KR; Fred, K8IG; Roger, N8TCP, and Linda, N8LRS to another successful VE Session on Sunday, July 9th, 2023, at the Old Elmwood Recreation Center in Independence.

Two hams passed their Technician exams becoming licensed amateurs. Congratulations to Phillip Huvler, KE8YUQ, and Nathan Vapenik, KE8YWD, and welcome to the Amateur Radio Service. James Lezak, WD8AGL, upgraded to General. Well done by all.

The next VE testing session will be held Sunday, September 10th, at **9:15 AM*** at the Old Elmwood Recreation Center, 6200 Pete Wisniesky Parkway, Independence 44131. Directions and a map are on the CARS website homepage. For information or an appointment please contact Metro, W8MET, at 216-520-1320 or metro351@sbcglobal.net

As always, walk-ins are welcome.

***Please note time change to 9:15 AM.**

NASA Report Bob, KC8MRC

A science museum in Los Angeles is in the process of erecting the space shuttle vertical for public display. It should be ready in a couple of months.

Honorary Members

Any person who by nature of outstanding or meritorious contribution to the furtherance of amateur radio and the ideals of the Cuyahoga Amateur Radio Society

Robert Check, W8GC

Elected 2/10/15

Thomas Wayne, WB8N

Elected 1/10/17

Dwaine Modock, K8ME, SK

Elected 5/9/17

Toby Kolman, WT8O

Elected 10/10/17

Jerry Smith, NW9H

Elected 5/8/18

Ron Borkey, K8VJG, SK

Elected 5/14/19

Ed Stevens, WB8ROK, SK

Elected 8/10/21

The Wobbly Oscillator is a publication of the Cuyahoga Amateur Radio Society, P.O. Box 31264, Independence, Ohio, 44131-0264. Articles from this publication may be reprinted in any ham radio publication, if credit is given to this publication and the author, if known. All submissions should be emailed to: wt8o@att.net

16th ANNUAL CARS PICNIC

SAVE THE DATE: Friday August 18, 2023 will be the day for CARS annual picnic. We will again be in the **Kiwanis Pavilion** behind the Independence Civic Center. We will serve hamburgers, hotdogs, brats, potato salad, Cole slaw plus all the trimmings. Desserts are welcome, feel free to bring one!

There will be a check-in on 146.820 with prizes starting at 5:00pm. We will have several door prizes for the winners of our drawings.

The picnic is FREE to all CARS members, family & friends!
All we ask is you tell us how many will be coming on or before Monday August 14th. Arrive anytime from 5:00pm, we plan to start eating about 5:30pm and food will be served till 6:00 or a little later if needed.

There will be games and activities for the entire family.

We need to know how many will be coming PLEASE Email your numbers to Toby, WT8Oat: wt8o@att.net or call 440-525-6109 ASAP!



CARS 2023 Officers & Committees

50/50
KD8SCV

Audit
K8RJH ** WT8O, KD8FTS

Audio/Video
AC8NW **

ARRL Liaison
K8RJH **

Awards
WT8O ** W8GC

Christmas party & Summer Picnic
WT8O **, K8ARP, KD8FTU, KD8FTV, WJ8WM

Field Day
K8RGI **, WT8O **, K8ARP, KD8SCV, AC8NW, AC8TN, WT8O, K8RJH, WJ8WM

50/50
KD8SCV

Fund Raising
W8GC ** K8RJH, KE8OZU, WA8GCR

Hamvention Bus
KD8FTS **, WT8O

Club Historian
WT8O **

License classes
KD8ACO **, WT8O, K8SHB

Media Representative
KD8SCV

Membership
WT8O ** W8GC

NET
WT8O **

Newsletter
WT8O ** 440-525-6109
wt8o@att.net

Programs at Meetings
KD8BAL ** KD8FTS, KE8OZU

Property Custodian's
KB8DTC paper records,
W8GC donations to sell
WT8O Quartermaster

Public Services
KD8FTS **, K8ARP

QSL Manager - W8BM
W8MET **



Refreshments at Meetings & Picnic
K8RJH ** pop, NU8H ** Donuts, NU8Y ** Coffee

Scholarship
W8GC ** K8RGI, KE8OZU, WT8O, K8RJH

Sunshine (welfare)
Andy, KD8SCV ** 440-886-0723

Technical
AC8NW ** N8OVW, WJ8WM, KD8ACO, K8RJH, KB8DTC, KC8ESG

VE Exams
Metro, W8MET ** 216-520-1320

Web Master/e-mail
W8GC ** KE8OZU
**** chairman or co-chairman**

2023 Officers

PRESIDENT
Toby Kolman WT8O 440-525-6109
wt8o@att.net

VICE-PRESIDENT
Ron Hollas, K8RJH, 216-379-7440

SECRETARY
Matt Perlman, KE8OZU, 216-337-1540
Alternate Secretary: Matt Neely NU8H

TREASURER:
Bob Check W8GC 216-524-1750
Alternate Treasurer: Matt Pearlman, KE8OZU

Board Members & License Trustees

Board Chairman:
Mark Moro WJ8WM 216-496-2871

even year executive board 2 year term
AC8NW, KB8DTC, WJ8WM

odd year executive board 2 year term
K8RGI, K8ARP, KD8FTS

License trustee
K8ZFR
WT8O

License trustee
W8HBI, W8BM,
W8GC

July 28, 2023

